Request to Archive With The National Centers for Environmental Information For Microwave Tropical Cyclone Products from NDE Provided by OSPO

2014-06-10

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

Liqun Ma NESDIS>OSDPD>OSPO Physical Scientist (301)763-8142 x196 liqun.ma@noaa.gov

2. Name the organization or group responsible for creating the dataset.

OSPO

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

The S-NPP Microwave Sounder-based TC Products provide estimates of tropical cyclone maximum wind, minimum sea level pressure, radii of 34, 50, 64 kt winds in 4 quadrants relative to the storm center, balanced horizontal winds 1000 to 200 mb within 600 km of the storm center.

Special coverage: Global tropical cyclone basins

6 x 6 degree domain centered on each active TC

Special resolution: Point values for intensity/radii

0.2 lat/lon grids for balanced winds.

Temporal resolution: 6-hour (0-6hr, 6-12hr, 12-18hr, 18-24hr)

The annual storage is dependent on the number of storms and their duration

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 2014-07-31

Ongoing as continuous updates to the data record

5. Edition or version number(s) of the dataset:

v1.3.4

6. Describe the level to which the data are processed. For example, are these unprocessed raw observations, derived parameters, quality controlled or inter-calibrated data, etc.?

Level 3

7. Approximate date when the dataset was or will be released to the public:

2014-07-31

8. Who are the expected users of the archived data? How will the archived data be used?

National Hurricane Center(NHC), Joint Typhoon warning Center(JTWC) as well as other tropical cyclone cernters and tropical cyclone research scientists

9. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?

No

10. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?

NPP-MIRS data is input source data for this product.

11. List the input datasets and ancillary information used to produce the data.

NPR-MIRS-IMG_v9_NPP*.nc NPR-MIRS-SND_v9_NPP*.nc

TC storm track files - <TC storm ID>.dat

1-degree global GFS analyses

12. List web pages and other links that provide information on the data.

Metadata are included in netCDF file attributes and data attributes.

- 13. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.
- 1. NPP-TC usurs Manual

NPP-TC System Maintenance Manual

NPP-TC Algorithm Theoretical Basis Document(ATBD)

- 14. Indicate the data file format(s).
- 1. netCDF-4
- 15. Are the data files compressed?

No

16. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).

TC-bbnnyyyy_v1r3_npp_syyyymmddhhmmsss_eyyyymmddhhmmsss_cyyyymmddhhmmsss_RZA.nc TC-bbnnyyyy_v1r3_npp_syyyymmddhhmmsss_eyyyymmddhhmmsss_cyyyymmddhhmmsss_XYA.nc

where

bb is the ocean basin(al,ep,cp,wp,sh,io) nn is the storm number in that basin in the current year yyyy is the storm year

yyyymmddhhmmsss is the year, month, day, hour, minute, second and tenths of seconds of the analysis,

17. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?

18. What is the total data volume to be submitted?

Historic Data: all historic data or data submitted as a completed collection.

Total Data Volume: 1.6MB

Number of Data Files: 2

Continuous Data: data volume rate for a continuous data production.

Total Data Volume Rate: 45MB per Day
Data File Frequency: 28 per Day
Data Production Start: 2014-07-31

19. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

No additional updates, revisions or replacement data are anticipated.

20. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location: Suitland MD 20746

System Name: DDS

System Owner: NESDIS/OSDPD/OSPO

Additional Information:

- 21. What are the possible methods for submitting the data to NCEI? Select all that apply.
- 1. FTP PULL
- 2. FTP PUSH
- 22. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.
- 1. Unknown
- 23. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

24. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

The NPP-TC archive data meet the NOAA mission goal to serve society's need for weather and water information. Archiving this data will benifit in studing the features of the tropical cyclone and improve the quality of this product in the future.

25. Are the data archived at another facility or are there plans to do so? Please explain.

No

26. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

No

27. Do you have a data management plan for your data?

No

28. Have funds been allocated to archive the data at NCEI?

JPSS PSDI fund

29. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

N/A

30. Is there a desired deadline for NCEI to archive and provide access to the data?

Archive by: 2014-07-31

Accessible by:

31. Add any other pertinent information for this request.

For an active tropical cyclone the volume would be \sim 6.4MB per day(4x1.6MB). The data volume in section 17 is the maximum estimated value(depends on how many tropical cyclones, 7 storms x6.4Mb \sim 45MB per day)